

[REDACTED]	8/22/2016	Detailed Report from the Diesel Emissions Quantifier
[REDACTED]	[REDACTED]	
[REDACTED]		
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[REDACTED]	[REDACTED]	[REDACTED]
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Type	Target Fleet	Class/Equipment
On Highway	Refuse Hauler	Refuse Hauler
On Highway	Short Haul - Single Unit	HHD Class 8

Number of Vehicles	Model Year	Retrofit Year	Technology Description	Fuel Type
1	1997	2016	Vehicle/Equipment Replacement	ULSD (15 ppm)
1	1998	2018	Vehicle/Equipment Replacement	ULSD (15 ppm)

Fuel Volume	Calculated Fuel Volume	Vehicle Miles Traveled/Year (VMT)	Idling Hours/Year
1859	1859	7436	110
1653	1653	6612	130

Horsepower	Usage Rate/Year	Number of Vehicles Retrofitted	New Model Year
		1	2016
		1	2016

Diesel Fuel Reduced (gallons)	Reduced Idling (hours)	Installation Cost	Unit Cost
0	0	\$0	\$165,440
0	0	\$0	\$169,475

Annual Baseline of Vehicles (NOx, short tons)	Lifetime Baseline of Vehicles (NOx, short tons)
0.237014179	0.237014179
0.204437408	0.204437408

Percent Reduced (NO _x , %)	Baseline of Vehicles Retrofitted per year (NO _x , short tons/year)
96.10%	0.237
95.80%	0.2044

Amount Reduced per Year(NOx, short tons)	Lifetime Baseline of Vehicles Retrofitted (NOx, short tons)
0.2278	0.237
0.1959	0.2044

Lifetime Amount Reduced (NOx, short tons)	Lifetime Amount Emitted After Retrofit, Retrofitted Vehicles (NOx, short tons)
0.2278	0.0092
0.1959	0.0086

Capital Cost Effectiveness (\$/short ton), Retrofitted Vehicles (NO_x)	Annual Baseline of Vehicles (PM_{2.5}, short tons)
726,344.76	0.01021745
865,326.03	0.00728102

Lifetime Baseline of Vehicles (PM2.5, short tons)	Percent Reduced (PM2.5, %)
0.01021745	98.10%
0.00728102	97.50%

Baseline of Vehicles Retrofitted per year (PM2.5, short tons/year)	Amount Reduced per Year(PM2.5, short tons)
0.0102	0.01
0.0073	0.0071

Lifetime Baseline of Vehicles Retrofitted (PM2.5, short tons)	Lifetime Amount Reduced (PM2.5, short tons)
0.0102	0.01
0.0073	0.0071

Lifetime Amount Emitted After Retrofit, Retrofitted Vehicles (PM2.5, short tons)	Capital Cost Effectiveness (\$/short ton), Retrofitted Vehicles (PM2.5)
0.0002	16,505,511.84
0.0002	23,873,097.94

Annual Baseline of Vehicles (HC, short tons)	Lifetime Baseline of Vehicles (HC, short tons)
0.009045973	0.009045973
0.008794617	0.008794617

Percent Reduced (HC, %)	Baseline of Vehicles Retrofitted per year (HC, short tons/year)
92.70%	0.009
92.60%	0.0088

Amount Reduced per Year(HC, short tons)	Lifetime Baseline of Vehicles Retrofitted (HC, short tons)
0.0084	0.009
0.0081	0.0088

Lifetime Amount Reduced (HC, short tons)	Lifetime Amount Emitted After Retrofit, Retrofitted Vehicles (HC, short tons)
0.0084	0.0007
0.0081	0.0007

Capital Cost Effectiveness (\$/short ton), Retrofitted Vehicles (HC)	Annual Baseline of Vehicles (CO, short tons)
19,729,019.31	0.053580279
20,810,271.44	0.051310727

Lifetime Baseline of Vehicles (CO, short tons)	Percent Reduced (CO, %)
0.053580279	94.90%
0.051310727	94.90%

Baseline of Vehicles Retrofitted per year (CO, short tons/year)	Amount Reduced per Year(CO, short tons)
0.0536	0.0508
0.0513	0.0487

Lifetime Baseline of Vehicles Retrofitted (CO, short tons)	Lifetime Amount Reduced (CO, short tons)
0.0536	0.0508
0.0513	0.0487

Lifetime Amount Emitted After Retrofit, Retrofitted Vehicles (CO, short tons)	Capital Cost Effectiveness (\$/short ton), Retrofitted Vehicles (CO)
0.0027	3,253,638.79
0.0026	3,480,416.87

Annual Baseline of Vehicles (CO2, short tons)	Lifetime Baseline of Vehicles (CO2, short tons)
20.6349	20.6349
18.3483	18.3483

Percent Reduced (CO2, %)	Baseline of Vehicles Retrofitted per year (CO2, short tons/year)
0.00%	20.6349
0.00%	18.3483

Amount Reduced per Year(CO2, short tons)	Lifetime Baseline of Vehicles Retrofitted (CO2, short tons)
0	20.6349
0	18.3483

Lifetime Amount Reduced (CO2, short tons)	Lifetime Amount Emitted After Retrofit, Retrofitted Vehicles (CO2, short tons)
0	20.6349
0	18.3483

**Capital Cost Effectiveness (\$/short ton),
Retrofitted Vehicles (CO2)**

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